

# PERAC AUDIT REPORT



Boston Retirement System

JAN. 1, 2011 - DEC. 31, 2013





# TABLE OF CONTENTS

|   |    |
|---|----|
| Letter from the Executive Director.....                     | 1  |
| Explanation of Findings and Recommendations .....           | 2  |
| Statement of Ledger Assets and Liabilities.....             | 5  |
| Statement of Changes in Fund Balances.....                  | 6  |
| Statement of Receipts.....                                  | 7  |
| Statement of Disbursements.....                             | 8  |
| Investment Income.....                                      | 9  |
| Schedule of Allocation of Investments Owned .....           | 10 |
| Supplementary Investment Regulations.....                   | 11 |
| Notes to Financial Statements:                              |    |
| Note 1 - Summary of Plan Provisions.....                    | 17 |
| Note 2 - Significant Accounting Policies .....              | 24 |
| Note 3 - Supplementary Membership Regulations.....          | 26 |
| Note 4 - Administration of the System.....                  | 31 |
| Note 5 - Actuarial Valuation and Assumptions.....           | 32 |
| Note 6 - Membership Exhibit.....                            | 33 |
| Note 7 – Software Acquisition and Development Costs .....   | 34 |
| Note 8 – Boston Retirement System Funding Obligations ..... | 34 |



# PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

JOSEPH E. CONNARTON, *Executive Director*

Auditor SUZANNE M. BUMP | KATE FITZPATRICK | ELIZABETH FONTAINE | JOHN B. LANGAN | JAMES M. MACHADO | ROBERT B. MCCARTHY

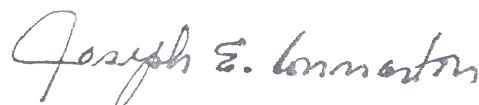
January 13, 2016

The Public Employee Retirement Administration Commission has completed an examination of the Boston Retirement System pursuant to G.L. c. 32, § 21. The examination covered the period from January 1, 2011 to December 31, 2013. This audit was conducted in accordance with the accounting and management standards established by the Public Employee Retirement Administration Commission, in regulation 840 CMR 25.00. Additionally, all supplementary regulations approved by PERAC and on file at PERAC are listed in this report.

In our opinion, the financial records are being maintained and the management functions are being performed in conformity with the standards established by the Public Employee Retirement Administration Commission with the exception of those noted in the findings presented in this report.

In closing, I acknowledge the work of examiners James Tivnan, James Ryan, William Walsh and Michael Pasternak who conducted this examination, and express appreciation to the Board of Retirement and staff for their courtesy and cooperation.

Sincerely,



Joseph E. Connarton  
Executive Director



# EXPLANATION OF FINDINGS AND RECOMMENDATIONS

## **I. Investment Accounting and Reporting**

The State Boston Retirement System (SBRS) is not in compliance with PERAC's guidelines relating to the accounting and reporting of investment related fees. PERAC memo #36/2014 Accounting for Investment Related Fees provides guidelines related to the filing of schedule 5 "Schedule of Pooled Funds" and schedule 7 "Summary of Investment Related Fees" with the Annual Statement of Financial Condition (Annual Report). Schedule 5 reflects the activity for all pooled funds. Schedule 7 reflects the fees of every financial service provider employed by the Board. SBRS did not file a schedule 5 for 2013. The schedule 7 filed by SBRS did not report all investment managers and related management fees. Investment Manager fees that are not included on the schedule 7 are also not reflected on the general ledger. The auditor also observed that SBRS did not file the schedule 6 "Summary of Investments Owned" with the 2013 Annual Report. This issue has been cited in previous PERAC Audit Reports.

The auditor observed the lack of a formal review and approval process for Management Fees not paid by check or wire. Fees charged by the investment manager were not validated when compared to the contract terms. Current investment contracts revealed fee rates referenced in the agreement were higher than current fees assessed. Some contracts did not contain any information in support of the fees imposed. The existing contracts must disclose the current fee structure in a more comprehensive method.

**Recommendation:** The Boston Retirement System must ensure that all investment service providers with whom the Board is involved be reflected within the required schedules of the Annual Report. The annual filing of schedules 5, 6, and 7 must accompany all other schedules of the Annual Report. Fees paid to all investment service providers must be tracked, recorded, and disclosed in the Annual Report. It is especially important to substantiate the fee in cases where the manager simply includes the fee as a net adjustment to the summary investment activity. Variances at year-end between the general ledger and Investment Manager Reports must be reconciled and explained. For guidelines to preparing the Annual Statement Schedules, please refer to the instructions provided for each reporting period.

Monthly Investment Management Fees must be reviewed and approved against the current contracted rate structure. The fee verification process must be performed in advance of payment. Investment contracts should be maintained with current correspondence supporting the existing contract terms, conditions and negotiated management fees.

### **Board Response:**

The Board agrees with this recommendation and will continue to look for ways to properly report investment fees in the manner required by PERAC. Additionally, the Board will reach out to their investment managers to ask for more transparent fee reporting.

## **2. Annuity Savings Fund/Supplemental Membership Schedule**

The Annuity Savings Fund database of membership activity is the most significant record that a

## EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

retirement system is required to maintain. PERAC requires that each Annual Statement contain a Supplemental Membership Schedule. This schedule must reconcile with the Annuity Savings Fund Account balance reflected on the general ledger. The membership database record file supplied during the current audit did not agree with the general ledger. The difference can be attributed to changes made to the membership records that are not reflected in the general ledger. The system must provide a statement to all members disclosing the beginning balance of their accumulated Annuity Savings Fund, contributions made during the current year, interest applied during the current period and the ending balance in their account at the recent calendar end period. This is the most complete subsidiary record for a specific date that is available to the system. This issue has been referenced in prior PERAC audit reports.

**Recommendation:** All financial changes to the Membership records must be reflected in the general ledger. The regular membership updating and correction process must better identify accounting issues as they occur. The credibility of the database records must be enhanced. The integrity of the general ledger fund balances must be improved. The general ledger balance in the Annuity Savings Fund must be adjusted to agree with the membership database record file at the next general ledger closing cycle.

### **Board Response:**

The Board agrees with PERAC and acknowledges the importance of the Annuity Savings Fund database. Currently, the Board is in the process of reconciling membership balances and working to improve reporting within our database. Additionally, the Board is looking at hiring an individual to focus solely on improving these records. Once the database is complete and accurate, the Board plans to provide statements to all members listing the balance of their accumulated Annuity Savings Fund.

### **3. Military Service Fund**

The Military Service Fund is not being handled in accordance with G.L. c. 32, §22 (4). The content of the Special Military Service Credit Fund is reported to contain contributions and interest for members while on a military leave for service in the Armed Forces who will receive creditable service for the period of that leave. The balance in the Fund has not changed with the exception of interest accrued at the statutory rate since 2003. No subsidiary record has been maintained with specific cumulative balances for the members assigned to this classification. This issue has been cited in prior audit reports.

### **Recommendation:**

The SBRS must work with the City Human Resources Department to specifically identify all past and present members who were deployed to military service. This analysis must account for all military service deductions that were due for collection from the City or other participating employers. These funds must be received and deposited into the Military Service Fund. A detailed subsidiary ledger needs to be actively maintained. The appropriate billing must be initiated for the uncollected contributions from the employers. Please refer to PERAC memo

## EXPLANATION OF FINDINGS AND RECOMMENDATIONS (Continued)

#39/2001 for additional guidance related to this process.

### **Board Response:**

The Board agrees with PERAC's recommendation and will work with the City of Boston's Human Resources Department to determine past and present members who were on military service leave in order to account for their respective deductions accordingly.

### **4. Board Member Attendance**

A review of meeting attendance by Board members revealed a member missed four of the monthly meetings during 2013. The result was an attendance rate for a Board member that was below the seventy-five percent minimum considered reasonable for one year during the audit period.

**Recommendation:** Attendance at Board meetings is an obligation that must be fulfilled by all Board members. Board members are obligated by their fiduciary duty to the retirement system to attend meetings regularly. The Board should consider adjusting the schedule of Board meetings in order to better accommodate its members and minimize scheduling conflicts. Consideration may also be given to the adoption of remote participation.

### **Board Response:**

The Board understands its obligation and all members of the Board take their duties very seriously. In the future, the Board will look for alternative meeting times if all Board Members cannot attend a scheduled meeting. Also, we note that the Board has adopted remote participation.

### **Final Determination**

***PERAC auditors will follow-up in six (6) months to ensure that appropriate actions have been taken regarding all findings.***



## STATEMENT OF LEDGER ASSETS AND LIABILITIES

| AS OF DECEMBER 31,                        |                               |                               |                               |
|---|-------------------------------|-------------------------------|-------------------------------|
|   | 2013                          | 2012                          | 2011                          |
| <b>Net Assets Available For Benefits:</b> |                               |                               |                               |
| Cash                                      | \$75,120,230                  | \$36,331,146                  | \$141,024,295                 |
| Short Term Investments                    | 67,059,110                    | 74,480,159                    | 86,472,580                    |
| Fixed Income Securities (at fair value)   | 694,066,093                   | 617,015,707                   | 568,578,767                   |
| Equities                                  | 510,968,481                   | 404,045,654                   | 429,110,602                   |
| Pooled Domestic Equity Funds              | 605,812,171                   | 561,696,701                   | 533,292,583                   |
| Pooled International Equity Funds         | 1,008,692,005                 | 722,526,215                   | 606,523,047                   |
| Pooled Global Fixed Income Funds          | 230,413,598                   | 267,210,638                   | 245,035,165                   |
| Pooled Alternative Investment Funds       | 521,093,460                   | 457,433,693                   | 378,056,457                   |
| Pooled Real Estate Funds                  | 346,516,564                   | 346,284,271                   | 321,248,679                   |
| PRIT Cash Fund                            | 99,536,439                    | 96,052,449                    | 4,000,914                     |
| PRIT Core Fund                            | 1,346,939,232                 | 1,325,113,804                 | 1,171,056,430                 |
| Interest Due and Accrued                  | 6,970,693                     | 8,378,509                     | 9,773,934                     |
| Accounts Receivable                       | 44,589,508                    | 60,202,485                    | 103,915,903                   |
| Accounts Payable                          | (66,580,959)                  | (66,260,735)                  | (126,489,225)                 |
| <b>Total</b>                              | <b><u>\$5,491,196,625</u></b> | <b><u>\$4,910,510,696</u></b> | <b><u>\$4,471,600,132</u></b> |
| <b>Fund Balances:</b>                     |                               |                               |                               |
| Annuity Savings Fund                      | \$1,522,622,330               | \$1,467,923,632               | \$1,420,685,018               |
| Annuity Reserve Fund                      | 460,326,003                   | 458,912,238                   | 454,109,387                   |
| Pension Fund                              | 106,108,658                   | 1,405,320                     | 151,181,664                   |
| Military Service Fund                     | 49,790                        | 49,739                        | 49,689                        |
| Expense Fund                              | 0                             | 0                             | 0                             |
| Pension Reserve Fund                      | <u>3,402,089,844</u>          | <u>2,982,219,767</u>          | <u>2,445,574,373</u>          |
| <b>Total</b>                              | <b><u>\$5,491,196,625</u></b> | <b><u>\$4,910,510,696</u></b> | <b><u>\$4,471,600,132</u></b> |

# STATEMENT OF CHANGES IN FUND BALANCES

|                          | Annuity Savings Fund | Annuity Reserve Fund | Pension Fund  | Military Service Fund | Expense Fund | Pension Reserve Fund | Total All Funds |
|--------------------------|----------------------|----------------------|---------------|-----------------------|--------------|----------------------|-----------------|
| Beginning Balance (2011) | \$1,396,965,941      | \$451,582,455        | \$302,334,434 | \$49,590              | \$0          | \$2,471,710,606      | \$4,622,643,025 |
| Receipts                 | 128,365,202          | 13,214,390           | 257,632,130   | 99                    | 23,975,892   | (26,136,231)         | 397,051,483     |
| Interfund Transfers      | (62,043,882)         | 62,043,882           | 0             | 0                     | 0            | 0                    | (0)             |
| Disbursements            | (42,602,242)         | (72,731,340)         | (408,784,901) |                       | (23,975,892) | 0                    | (548,094,375)   |
| Ending Balance (2011)    | 1,420,685,019        | 454,109,387          | 151,181,663   | 49,689                | 0            | 2,445,574,375        | 4,471,600,133   |
| Receipts                 | 129,085,774          | 13,358,887           | 272,959,979   | 50                    | 26,732,905   | 536,645,393          | 978,782,988     |
| Interfund Transfers      | (67,804,500)         | 67,804,500           | 0             | 0                     | 0            | 0                    | 0               |
| Disbursements            | (14,042,660)         | (76,360,536)         | (422,736,323) | 0                     | (26,732,905) | 0                    | (539,872,424)   |
| Ending Balance (2012)    | 1,467,923,633        | 458,912,238          | 1,405,319     | 49,739                | 0            | 2,982,219,768        | 4,910,510,697   |
| Receipts                 | 141,196,545          | 13,704,783           | 298,294,335   | 50                    | 34,084,964   | 665,257,583          | 1,152,538,260   |
| Interfund Transfers      | (69,304,852)         | 69,305,568           | 245,386,788   | 0                     | 0            | (245,387,504)        | 0               |
| Disbursements            | (17,192,996)         | (81,596,586)         | (438,977,786) | 0                     | (34,084,964) | 0                    | (571,852,332)   |
| Ending Balance (2013)    | \$1,522,622,330      | \$460,326,003        | \$106,108,656 | \$49,789              | \$0          | \$3,402,089,847      | \$5,491,196,625 |

# STATEMENT OF RECEIPTS

| FOR THE PERIOD ENDING DECEMBER 31,  |                        |                      |                      |
|---|------------------------|----------------------|----------------------|
|   | 2013                   | 2012                 | 2011                 |
| <b>Annuity Savings Fund:</b>  |                        |                      |                      |
| Members Deductions  | \$135,284,470          | \$124,563,817        | \$122,674,340        |
| Transfers from Other Systems  | 3,226,931              | 2,156,506            | 2,214,244            |
| Member Make Up Payments and Re-deposits   | 764,637                | 771,681              | 806,775              |
| Member Payments from Rollovers  | 530,294                | 240,889              | 0                    |
| Investment Income Credited to Member Accounts   | <u>1,390,213</u>       | <u>1,352,881</u>     | <u>2,669,844</u>     |
| Sub Total   | <u>141,196,545</u>     | <u>129,085,774</u>   | <u>128,365,202</u>   |
| <b>Annuity Reserve Fund:</b>  |                        |                      |                      |
| Recovery of Annuity from Reinstatement  | 0                      | 15,734               | 0                    |
| Investment Income Credited to the Annuity Reserve Fund  | <u>13,704,783</u>      | <u>13,343,153</u>    | <u>13,214,390</u>    |
| Sub Total   | <u>13,704,783</u>      | <u>13,358,887</u>    | <u>13,214,390</u>    |
| <b>Pension Fund:</b>  |                        |                      |                      |
| 3 (8) (c) Reimbursements from Other Systems Received from Commonwealth for COLA and Survivor Benefits | 2,550,158              | 2,239,273            | 2,272,962            |
| Pension Fund Appropriation  | 7,253,168              | 8,606,926            | 10,079,495           |
| Settlement of Workers' Compensation Claims  | 288,458,359            | 261,942,780          | 245,279,673          |
| Recovery of Pension from Reinstatement  | 0                      | 0                    | 0                    |
| Recovery of Pension from Reinstatement  | 0                      | 30,614               | 0                    |
| Recovery of 91A Overearnings  | 32,650                 | 140,386              | 0                    |
| Sub Total   | <u>298,294,335</u>     | <u>272,959,979</u>   | <u>257,632,130</u>   |
| <b>Military Service Fund:</b>   |                        |                      |                      |
| Investment Income Credited to the Military Service Fund   | <u>50</u>              | <u>50</u>            | <u>99</u>            |
| Sub Total   | <u>50</u>              | <u>50</u>            | <u>99</u>            |
| <b>Expense Fund:</b>  |                        |                      |                      |
| Investment Income Credited to the Expense Fund  | <u>34,084,964</u>      | <u>26,732,905</u>    | <u>23,975,892</u>    |
| Sub Total   | <u>34,084,964</u>      | <u>26,732,905</u>    | <u>23,975,892</u>    |
| <b>Pension Reserve Fund:</b>  |                        |                      |                      |
| Interest Not Refunded   | 55,345                 | 172,827              | 140,278              |
| Miscellaneous Income  | (216,936)              | 2,059,306            | 1,961,181            |
| Excess Investment Income (Loss)   | <u>665,419,174</u>     | <u>534,413,260</u>   | <u>(28,237,691)</u>  |
| Sub Total   | <u>665,257,583</u>     | <u>536,645,393</u>   | <u>(26,136,231)</u>  |
| <b>Total Receipts, Net</b>  | <u>\$1,152,538,260</u> | <u>\$978,782,988</u> | <u>\$397,051,483</u> |

# STATEMENT OF DISBURSEMENTS

| FOR THE PERIOD ENDING DECEMBER 31,        |                      |                      |                      |
|---|----------------------|----------------------|----------------------|
|   | 2013                 | 2012                 | 2011                 |
| <b>Annuity Savings Fund:</b>              |                      |                      |                      |
| Refunds to Members                        | \$11,731,199         | \$11,629,218         | \$11,083,624         |
| Transfers to Other Systems                | <u>5,461,797</u>     | <u>2,413,442</u>     | <u>31,518,618</u>    |
| Sub Total                                 | <u>17,192,996</u>    | <u>14,042,660</u>    | <u>42,602,242</u>    |
| <b>Annuity Reserve Fund:</b>              |                      |                      |                      |
| Annuities Paid                            | 80,657,123           | 75,854,722           | 71,574,108           |
| Option B Refunds                          | <u>939,463</u>       | <u>505,814</u>       | <u>1,157,232</u>     |
| Sub Total                                 | <u>81,596,586</u>    | <u>76,360,536</u>    | <u>72,731,340</u>    |
| <b>Pension Fund:</b>                      |                      |                      |                      |
| Pensions Paid:                            |                      |                      |                      |
| Regular Pension Payments                  | 323,904,410          | 313,474,654          | 300,211,010          |
| Survivorship Payments                     | 11,293,705           | 10,107,650           | 10,519,654           |
| Ordinary Disability Payments              | 3,360,137            | 3,505,512            | 3,586,109            |
| Accidental Disability Payments            | 74,180,033           | 69,463,922           | 68,699,767           |
| Accidental Death Payments                 | 11,894,499           | 12,860,997           | 12,815,874           |
| Section 101 Benefits                      | 3,399,309            | 2,504,878            | 2,493,887            |
| 3 (8) (c) Reimbursements to Other Systems | <u>10,945,693</u>    | <u>10,818,710</u>    | <u>10,458,600</u>    |
| Sub Total                                 | <u>438,977,786</u>   | <u>422,736,323</u>   | <u>408,784,901</u>   |
| <b>Expense Fund:</b>                      |                      |                      |                      |
| Board Member Stipend                      | 18,191               | 10,471               | 10,462               |
| Salaries                                  | 3,163,655            | 2,859,913            | 2,757,100            |
| Legal Expenses                            | 43,488               | 106,930              | 86,061               |
| Medical Expenses                          | 62,058               | 59,817               | 58,649               |
| Travel Expenses                           | 8,621                | 6,944                | 9,051                |
| Administrative Expenses                   | 3,429,075            | 3,066,853            | 1,585,955            |
| Furniture and Equipment                   | 23,927               | 379,430              | 58,536               |
| Management Fees                           | 26,083,804           | 18,852,748           | 17,877,131           |
| Custodial Fees                            | 367,695              | 285,337              | 433,549              |
| Consultant Fees                           | 562,801              | 655,030              | 827,072              |
| Service Contracts                         | 31,469               | 176,309              | 6,630                |
| Fiduciary Insurance                       | <u>290,180</u>       | <u>273,123</u>       | <u>265,697</u>       |
| Sub Total                                 | <u>34,084,964</u>    | <u>26,732,905</u>    | <u>23,975,892</u>    |
| <b>Total Disbursements</b>                | <u>\$571,852,332</u> | <u>\$539,872,424</u> | <u>\$548,094,375</u> |

# INVESTMENT INCOME

| FOR THE PERIOD ENDING DECEMBER 31,                      |                      |                      |                       |
|---|----------------------|----------------------|-----------------------|
|   | 2013                 | 2012                 | 2011                  |
| <b>Investment Income Received From:</b>                 |                      |                      |                       |
| Cash  | 253,205              | 389,027              | \$173,467             |
| Short Term Investments                                  | 83,297               | 235,826              | 130,263               |
| Fixed Income  | 22,691,078           | 30,237,317           | 29,502,636            |
| Equities  | 32,780,596           | 30,082,694           | 33,767,977            |
| Pooled or Mutual Funds                                  | 63,222,144           | 60,913,977           | 68,371,884            |
| Commission Recapture                                    | 4,650                | 121,461              | 22,012                |
| <b>Total Investment Income</b>                          | <u>119,034,970</u>   | <u>121,980,302</u>   | <u>131,968,239</u>    |
| <b>Plus:</b>  |                      |                      |                       |
| Realized Gains  | 123,824,292          | 84,315,361           | 58,609,648            |
| Unrealized Gains  | 732,525,767          | 574,047,477          | 307,590,221           |
| Interest Due and Accrued - Current Year                 | <u>6,970,693</u>     | <u>8,378,509</u>     | <u>9,773,934</u>      |
| Sub Total   | <u>863,320,752</u>   | <u>666,741,347</u>   | <u>375,973,802</u>    |
| <b>Less:</b>  |                      |                      |                       |
| Paid Accrued Interest on Fixed Income Securities        | (2,822,561)          | (3,131,566)          | (4,736,407)           |
| Realized Loss   | (1,555,733)          | (761,292)            | (12,848,759)          |
| Unrealized Loss   | (254,999,734)        | (199,212,608)        | (469,736,028)         |
| Interest Due and Accrued - Prior Year                   | <u>(8,378,509)</u>   | <u>(9,773,934)</u>   | <u>(8,998,313)</u>    |
| Sub Total   | <u>(267,756,537)</u> | <u>(212,879,400)</u> | <u>(496,319,507)</u>  |
| <b>Net Investment Income</b>                            | <u>714,599,184</u>   | <u>575,842,249</u>   | <u>11,622,534</u>     |
| <b>Income Required:</b>                                 |                      |                      |                       |
| Annuity Savings Fund                                    | 1,390,213            | 1,352,881            | 2,669,844             |
| Annuity Reserve Fund                                    | 13,704,783           | 13,343,153           | 13,214,390            |
| Military Service Fund                                   | 50                   | 50                   | 99                    |
| Expense Fund  | <u>34,084,964</u>    | <u>26,732,905</u>    | <u>23,975,892</u>     |
| <b>Total Income Required</b>                            | <u>49,180,010</u>    | <u>41,428,989</u>    | <u>39,860,225</u>     |
| Net Investment Income                                   | <u>714,599,184</u>   | <u>575,842,249</u>   | <u>11,622,534</u>     |
| Less: Total Income Required                             | <u>49,180,010</u>    | <u>41,428,989</u>    | <u>39,860,225</u>     |
| <b>Excess Income (Loss) To The Pension Reserve Fund</b> | <u>\$665,419,174</u> | <u>\$534,413,260</u> | <u>(\$28,237,691)</u> |

## SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

| AS OF DECEMBER 31, 2013                 |                               |                                  |
|---|-------------------------------|----------------------------------|
|   | MARKET VALUE                  | PERCENTAGE<br>OF TOTAL<br>ASSETS |
| Cash                                    | \$75,120,230                  | 1.4%                             |
| Short Term Investments                  | 67,059,110                    | 1.2%                             |
| Fixed Income Securities (at fair value) | 694,066,093                   | 12.6%                            |
| Equities                                | 510,968,481                   | 9.3%                             |
| Pooled Domestic Equity Funds            | 605,812,171                   | 11.0%                            |
| Pooled International Equity Funds       | 1,008,692,005                 | 18.3%                            |
| Pooled Global Fixed Income Funds        | 230,413,598                   | 4.2%                             |
| Pooled Alternative Investment Funds     | 521,093,460                   | 9.5%                             |
| Pooled Real Estate Funds                | 346,516,564                   | 6.3%                             |
| PRIT Cash Fund                          | 99,536,439                    | 1.8%                             |
| PRIT Core Fund                          | <u>1,346,939,232</u>          | <u>24.5%</u>                     |
| <b>Grand Total</b>                      | <b><u>\$5,506,217,383</u></b> | <b><u>100.0%</u></b>             |

For the year ending December 31, 2013, the rate of return for the investments of the Boston Retirement System was 15.34%. For the five-year period ending December 31, 2013 the rate of return for the investments of the Boston Retirement System averaged 12.30%. For the twenty eight-year period ending December 31, 2013, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Boston Retirement System was 9.32%.

The composite rate of return for all retirement systems for the year ending December 31, 2013 was 15.57%. For the five-year period ending December 31, 2013, the composite rate of return for the investments of all retirement systems averaged 12.13%. For the twenty eight-year period ending December 31, 2013, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.49%.

## SUPPLEMENTARY INVESTMENT REGULATIONS

The Boston Retirement System submitted the following supplementary investment regulations which were approved by the Public Employee Retirement Administration Commission on

June 16, 2011

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Sterling Capital Partners IV. The Board has been a satisfied investor in Sterling Capital's three predecessor funds. The management team and strategy are essentially the same. The manager has submitted the required updated regulatory documents.

June 6, 2011

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Siguler Guff Distressed Opportunities Fund IV. The Board has been a satisfied investor in Siguler Guff's three predecessor funds. The investment strategy and portfolio management team are essentially unchanged. The manager has submitted the required updated regulatory documents.

June 25, 2010

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Westech Investment Advisors Inc.'s Venture Lending & Leasing VI. The Board has been a satisfied investor in the manager's three predecessor funds with similar strategy and the same management team, and it has submitted the required updated documents.

May 25, 2010

The Boston Retirement Board is authorized to invest in the RhumbLine Core Bond Pooled Index Fund on a temporary basis. This investment is necessary as a result of unanticipated delays in final passage of the legislation intended to split the assets attributable to the Teachers and non-Teachers. As a result of its existing relationship with RhumbLine, the Board, in conjunction with its investment consultant, determined that a temporary investment in the firm's bond index fund was the most effective and efficient means to invest the \$253 million in unanticipated cash.

February 3, 2010

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Audax Mezzanine Fund III. The Board has been a satisfied investor in Audax Group's immediate predecessor fund. The manager has submitted updated regulatory documents and other relevant information

February 1, 2010

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Lexington Capital Partners VII. The Board has been a satisfied investor in the manager's predecessor fund. Lexington Capital Partners has submitted the appropriate updated regulatory documents.

## SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

December 15, 2009

(1) Notwithstanding the provisions of the Public Employee Retirement Administration Commission regulations, the Boston Retirement Board may invest funds of the Boston Retirement System (the “System”) in the fund known as TA Realty Associates Fund IX (consisting of Realty Associates Fund IX Corporation and The Realty Associates Fund IX, L.P., collectively, the “Fund”), and while the assets of the System are so invested, the assets of the System shall be deemed to include, for purposes of applying the rules set forth in 840 CMR 16.00 et seq., 17.00 et seq., and 840 CMR 21.01, the System’s interest in the Fund but not any of the underlying assets of the Fund; provided that, at all times, either (A) less than twenty-five percent (25%) of each class of equity interest in the Fund is held by “benefit plan investors” (within the meaning of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”) and the regulations promulgated thereunder), or (B) the Fund qualifies as a “venture capital operating company” and/or “real estate operating company” within the meaning of ERISA and the regulations promulgated thereunder. (2) The limitations and restrictions of 840 CMR Section 19.01(6) shall not apply to the Fund for the two-year period commencing on the date of the Fund’s initial investment.

(2) October 26, 2009

In executing its strategy, the J.P. Morgan Large Cap Core 130/30 Fund may (1) execute short sales in an amount of approximately 30% of the portfolio’s net market value and purchase additional stocks with these proceeds and (2) purchase stocks on margin. Total market exposure will be approximately 1.0.

October 22, 2009

In the 130/30 Enhanced Large Cap Equity Fund, D.E. Shaw Investment Management will maintain total market exposure of 1.0 time but it may execute short sales in an amount of approximately 30% of the account’s net market value and purchase additional stocks with the proceeds of these sales. The manager may also purchase stocks on margin.

April 13, 2009

The Boston Retirement Board is authorized to increase its private equity target allocation from 5.0% to 7.5%. This adjustment is necessary because of changes in the Board’s investment portfolio as a result of the implementation of pending legislation.

February 25, 2008

In accordance with Investment Guideline 99-3, the Boston Retirement Board may invest in Lexington Middle Market Investors II, L.P. The Board has been a satisfied investor in Lexington Middle Market Investors’ first fund as well as the two private equity partnerships managed by Lexington Capital Partners. The manager has submitted updated regulatory documents.

January 18, 2008

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Singular Guff Distressed Opportunities Fund III. The Board has been a satisfied investor in the manager’s two previous partnerships. Performance has been favorable and there



## SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

is no substantive change in the management team or in its strategy. The manager has submitted updated regulatory documents.

October 29, 2007

The Boston Retirement Board may invest up to 7.5% of its portfolio assets in hedge funds of funds selected through its own competitive processes. This exception from the Commission's 5% limit is based on the Board's four-year record of successful investment in hedge fund of funds. All hedge funds of funds selected under this supplementary regulation must comply with PERAC's guidelines for hedge fund investment.

October 3, 2007

In accordance with Investment Guideline 99-2, the Boston Retirement Board is modifying its real estate management mandate with Urdang Capital Management. Rather than continuing to fund its existing separate account, the Board will initiate investment in the Urdang Value Added Fund II, a commingled fund with the same basic strategy and objective. The new fund will offer greater efficiencies to the Board from both an investment and an administrative viewpoint.

September 19, 2007

The Boston Retirement Board may invest in LaSalle Income & Growth Fund V. The Board has been a satisfied investor in LaSalle Income & Growth Fund III and over half the invested proceeds of that investment have been returned to the Board. There have been no substantive changes in the management team or in fund strategy. The Board has submitted the required regulatory documents.

June 27, 2007

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Sterling Capital Partners III. The Board has been a satisfied investor in SCP's two predecessor funds. Performance has been good, the management team is intact, and the strategy is consistent. The Board has submitted the required regulatory documents.

March 21, 2007

Notwithstanding the provisions of the Public Employee Retirement Administration Commission regulations, the Boston Retirement Board may invest the funds of the Retirement System (the "System") in the fund known as INVESCO Core Real Estate USA, LLC (the "Fund"), and effective as of the date of the initial investment by the System of any of its assets in the Fund, while the assets of the System are so invested, the assets of the System shall be deemed to include, for purposes of applying the rules set forth in 840 CMR 16.00 et seq. and 17.00 et seq., the System's interest in the Fund but not any of the underlying assets of the Fund; provided that, at all times, the Fund qualified as a "venture capital operating company" within the meaning of the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated there under.

February 5, 2007

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to

## SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

invest in MPM Asset Management's MPM BioVentures IV, L.P. The Board has been a satisfied investor in the predecessor fund, MPM BioVentures III, L.P. and has submitted updated regulatory documents pertaining to this investment.

January 29, 2007

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Westech Investment Advisors' Venture Lending & Leasing V, LLC. The Board has been a satisfied investor in the manager's two previous partnerships, the management team and strategy remain the same, and the board has submitted the required regulatory documents.

December 20, 2006

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Blue Point Capital Partners II, L.P. The Board has been a satisfied investor in Blue Point Capital Partners, L.P. and the new fund has the same strategy and management group. The manager has submitted an updated Exemption Application and Disclosure Statement.

December 4, 2006

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Standard Life European Strategic Partners Fund 2006. The Board has been a satisfied investor in Standard Life's first ESP Fund (2000) and the basic strategy as well as the management team are essentially the same. The manager has submitted the required updated regulatory documents.

April 28, 2006

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Thomas H. Lee Equity Fund VI. The Board has been a satisfied investor in Thomas H. Lee Equity Fund V, as well as two earlier Thomas H. Lee partnerships.

March 21, 2006

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Audax Mezzanine Fund II, L.P. The Board has been an investor in Audax Mezzanine Fund I, L.P., which has similar strategy and the same management team, and returns have been favorable to date. The manager has submitted the required undated regulatory documents.

January 27, 2006

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Lexington Capital Partners VI, L.P. The Board has been a satisfied investor in Lexington Capital Partners V and the new fund has the same strategy and management group. The manager has submitted an updated Exemption Application and Disclosure Statement.

June 14, 2005

In accordance with PERAC Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Siglar Guff Distressed Opportunities Fund II. The Board has been a sat-

## SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

isfied investor in Sigular Guff Distressed Opportunities Fund I, the new fund has essentially the same management team and strategy as the existing one, and the Board has submitted all the required regulatory documents.

June 14, 2005

In accordance with PERAC Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in the Sterling Capital Partners II. The Board has been a satisfied investor in Sterling Capital Partners I, the new fund has essentially the same strategy and management team, and the Board has submitted all the required regulatory documents.

June 1, 2005

In accordance with PERAC Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Lexington Middle Market Investors, LP. The Board has been a satisfied investor in Lexington Advisors' predecessor fund, Lexington Capital Ventures V, which has had excellent performance to date. The new fund, focusing on middle market U.S. buyout funds, is more narrowly focused than the previous fund but will be managed by the same investment team under similar strategic investment principles.

October 27, 2004

For the sole purpose of the Boston Retirement Board's investment in Ivy Asset Management's Maplewood Associates, II, LP, the provisions of 840 CMR 21.01(1), 21.01(2), 21.02(3), 21.01(5), and 21.01(6) shall not apply.

October 27, 2004

For the sole purpose of the Boston Retirement Board's investment in Mesirow Advanced Strategies' Absolute Return Fund, the provisions of 840 CMR 21.01(1), 21.01(2), 21.02(3), 21.01(5), and 21.01(6) shall not apply.

October 27, 2004

For the sole purpose of the Boston Retirement Board's investment in Arden Asset Management's Endowment Advisors Fund, the provisions of 840 CMR 21.01(1), 21.01(2), 21.02(3), 21.01(5), and 21.01(6) shall not apply.

October 12, 2004

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Sanderling Ventures VI. The Board has been a satisfied investor in the predecessor fund, Sanderling Ventures V, and the new fund has the same investment strategy and management team as the existing one.

October 12, 2004

In accordance with Investment Guideline 99-3, the Boston Retirement Board is authorized to invest in Prudential Capital Partners II. The Board has been a satisfied investor in the predecessor fund, Prudential Capital Partners I, and the new fund has the same investment strategy and management team as the existing one.

## SUPPLEMENTARY INVESTMENT REGULATIONS (Continued)

March 8, 2004

In accordance with Investment Guideline 99-3, the Boston Retirement Board may invest in Venture Lending & Leasing IV. The Board has been a satisfied investor in the predecessor fund, Venture Lending & Leasing III, and has submitted updated regulatory documents pertaining to this investment.

March 14, 2003

The Boston Retirement Board may commit up to \$8,559,510 to the Hearthstone Multi-State Residential Value-Added Fund III. This represents the amount committed to but not yet called in the Board's investment in the predecessor fund, Hearthstone MS II. The Boston Retirement Board may commit \$10,000,000 to the LaSalle Income and Growth Fund III. Funds from this investment will come totally from return of capital from the Board's investment in the predecessor fund, LaSalle II.

February 4, 2003

In accordance with Investment Guideline 99-3, the Boston Retirement Board may invest in the Vanguard VI Annex Fund, LP. This Annex Fund has recently been opened and is essentially a follow on investment to the Vanguard VII Fund in which the Boston Retirement Board has been invested since 2000. The Board has had a satisfactory relationship with Vanguard and has submitted the required documentation relative to this new investment.

March 24, 2000

The Boston Retirement Board may invest in the Thomas H. Lee Equity Fund V, L.P. The Board has invested in three prior Thomas H. Lee partnerships and has submitted the appropriate data and documents in support of this request.

February 7, 2000

In accordance with PERAC Investment Guideline 99-3, the Boston Retirement Board may invest in Thomas H. Lee Putnam Internet Partners, L.P. The Board has been a participant in two previous Thomas H. Lee Partnerships with very satisfactory returns. The management team for this partnership is the same entity as the previous ones; the name change refers to a corporate reorganization under which Putnam Investments, Inc. now owns 25% of the capital interests. The technology focus of the new partnership will provide diversification to the Board's private equity investments in that the previous partnerships have focused on more traditional industries.

# NOTES TO FINANCIAL STATEMENTS

## NOTE 1 – SUMMARY OF PLAN PROVISIONS

The plan is a contributory defined benefit plan covering all Boston Retirement System member unit employees deemed eligible by the retirement board, including school department employees who serve in a teaching capacity.

### ADMINISTRATION

There are 105 contributory retirement systems for public employees in Massachusetts. Each system is governed by a retirement board and all boards, although operating independently, are governed by Chapter 32 of the Massachusetts General Laws. This law in general provides uniform benefits, uniform contribution requirements and a uniform accounting and funds structure for all systems.

### PARTICIPATION

Participation is mandatory for all full-time employees. Eligibility with respect to part-time, provisional, temporary, seasonal or intermittent employment is governed by regulations promulgated by the retirement board, and approved by PERAC. Membership is optional for certain elected officials.

There are 4 classes of membership in the retirement system, but one of these classes, Group 3, is made up exclusively of the State Police. The other 3 classes are as follows:

#### **Group 1:**

General employees, including clerical, administrative, technical and all other employees not otherwise classified.

#### **Group 2:**

Certain specified hazardous duty positions.

#### **Group 4:**

Police officers, firefighters, and other specified hazardous positions.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### MEMBER CONTRIBUTIONS

Member contributions vary depending on the most recent date of membership and whether the member has accepted the provisions of Chapter 114 of the Acts of 2000, thereby enrolling in Retirement*Plus*. This term includes the Teachers' Alternate Retirement Program (TARP) of the Boston Retirement System:

|                    |   |
|--------------------|---|
| Prior to 1975:     | 5% of regular compensation                                      |
| 1975 - 1983:       | 7% of regular compensation                                      |
| 1984 to 6/30/96:   | 8% of regular compensation                                      |
| 7/1/96 to present: | 9% of regular compensation                                      |
| 1979 to present:   | an additional 2% of regular compensation in excess of \$30,000. |

In addition, members of Group 1 who join the system on or after April 2, 2012 will have their withholding rate reduced to 6% after achieving 30 years of creditable service.

In addition, if the member's most recent date of membership was prior to July 1, 2001 and the member has enrolled in Retirement*Plus*, and eligible members beginning service on or after July 1, 2001: 11% of regular compensation

### RATE OF INTEREST

Interest on regular deductions made after January 1, 1984 is a rate established by PERAC in consultation with the Commissioner of Banks. The rate is obtained from the average rates paid on individual savings accounts by a representative sample of at least 10 financial institutions.

### RETIREMENT AGE

The mandatory retirement age for some Group 2 and Group 4 employees is age 65. Most Group 2 and Group 4 members may remain in service after reaching age 65. Group 4 members who are employed in certain public safety positions are required to retire at age 65. There is no mandatory retirement age for employees in Group 1.

### SUPERANNUATION RETIREMENT

A person who became a member before April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions completion of 20 years of service, or attainment of age 55 if hired prior to 1978, or if classified in Group 4, or attainment of age 55 with 10 years of service, if hired after 1978, and if classified in Group 1 or 2

A person who became a member on or after April 2, 2012 is eligible for a superannuation retirement allowance (service retirement) upon meeting the following conditions: attainment of age 60 with 10 years of service if classified in Group 1, or attainment of age 55 with 10 years of service if classified in Group 2, or attainment of age 55 if classified in Group 4.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### AMOUNT OF BENEFIT

A member's annual allowance is determined by multiplying average salary by a benefit rate related to the member's age and job classification at retirement, and the resulting product by his creditable service. The amount determined by the benefit formula cannot exceed 80% of the member's highest three year (or five year as discussed below) average salary. For veterans as defined in G.L. c. 32, s. 1,

there is an additional benefit of \$15 per year for each year of creditable service, up to a maximum of \$300. three year (or five year as discussed below) average salary. For veterans as defined in G.L. c. 32, s. 1, there is an additional benefit of \$15 per year for each year of creditable service, up to a maximum of \$300.

For employees who become members after January 1, 2011, regular compensation is limited to 64% of the federal limit found in 26 U.S.C. 401(a)(17). In addition, regular compensation will be limited to prohibit "spiking" of a member's salary to increase the retirement benefit.

For persons who became members prior to April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 3 consecutive years that produce the highest average, or, if greater, during the last 3 years (whether or not consecutive) preceding retirement.

For persons who became members on or after April 2, 2012, Average Salary is the average annual rate of regular compensation received during the 5 consecutive years that produce the highest average, or, if greater, during the last 5 years (whether or not consecutive) preceding retirement.

The Benefit Rate varies with the member's retirement age. For persons who became members prior to April 2, 2012 the highest rate of 2.5% applies to Group 1 employees who retire at or after age 65, Group 2 employees who retire at or after age 60, and to Group 4 employees who retire at or after age 55. A .1% reduction is applied for each year of age under the maximum age for the member's group. For Group 2 employees who terminate from service under age 55, the benefit rate for a Group 1 employee shall be used.

For persons who became members on or after April 2, 2012 and retire with less than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 57. A .15% reduction is applied for each year of age under the maximum age for the member's group.

For persons who became members on or after April 2, 2012 and retire with more than 30 years of creditable service, the highest rate of 2.5% applies to Group 1 employees who retire at or after age 67, Group 2 employees who retire at or after age 62, and to Group 4 employees who retire at or after age 55. A .125% reduction is applied for each year of age under the maximum age for the member's group.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### DEFERRED VESTED BENEFIT

A participant who has attained the requisite years of creditable service can elect to defer his or her retirement until a later date. Certain public safety employees cannot defer beyond age 65. All participants must begin to receive a retirement allowance or withdraw their accumulated deductions no later than April 15 of the calendar year following the year they reach age 70½.

### WITHDRAWAL OF CONTRIBUTIONS

Member contributions may be withdrawn upon termination of employment. The interest rate for employees who first become members on or after January 1, 1984 who voluntarily withdraw their contributions with less than 10 years of service will be 3%. Interest payable on all other withdrawals will be set at regular interest.

### DISABILITY RETIREMENT

The Massachusetts Retirement Plan provides 2 types of disability retirement benefits:

#### ORDINARY DISABILITY

**Eligibility:** Non-veterans who become totally and permanently disabled by reason of a non-job related condition with at least 10 years of creditable service (or 15 years creditable service in systems in which the local option contained in G.L. c. 32, s.6(1) has not been adopted).

Veterans with ten years of creditable service who become totally and permanently disabled by reason of a non-job related condition prior to reaching “maximum age”. “Maximum age” applies only to those employees classified in Group 4 who are subject to mandatory retirement.

**Retirement Allowance:** For persons who became members prior to April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 55. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 55, he or she will receive not less than the superannuation allowance to which he or she is entitled.

For persons in Group 1 who became members on or after April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 60. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months, plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 60, he or she will receive not less than the superannuation allowance to which he or she would have been entitled had they retired for superannuation.

For persons in Group 2 and Group 4 who became members on or after April 2, 2012, the benefit is equal to the accrued superannuation retirement benefit as if the member was age 55. If the member is a veteran, the benefit is 50% of the member’s final rate of salary during the preceding 12 months,



## NOTES TO FINANCIAL STATEMENTS (Continued)

plus an annuity based upon accumulated member contributions plus credited interest. If the member is over age 55, he or she will receive not less than the superannuation allowance to which he or she would have been entitled had they retired for superannuation.

### ACCIDENTAL DISABILITY

**Eligibility:** Applies to members who become permanently and totally unable to perform the essential duties of the position as a result of a personal injury sustained or hazard undergone while in the performance of duties. There are no minimum age or service requirements.

**Retirement Allowance:** 72% of salary plus an annuity based on accumulated member contributions, with interest. This amount is not to exceed 100% of pay. For those who became members in service after January 1, 1988 or who have not been members in service continually since that date, the amount is limited to 75% of pay. There is an additional pension of \$797.64 per year (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 7(2)(a)(iii) has not been adopted), per child who is under 18 at the time of the member's retirement, with no age limitation if the child is mentally or physically incapacitated from earning. The additional pension may continue up to age 22 for any child who is a full time student at an accredited educational institution. For systems that have adopted Chapter 157 of the Acts of 2005, veterans as defined in G.L. c. 32, s. 1 receive an additional benefit of \$15 per year for each year of creditable service, up to a maximum of \$300.

### ACCIDENTAL DEATH

**Eligibility:** Applies to members who die as a result of a work-related injury or if the member was retired for accidental disability and the death was the natural and proximate result of the injury or hazard undergone on account of which such member was retired.

**Allowance:** An immediate payment to a named beneficiary equal to the accumulated deductions at the time of death, plus a pension equal to 72% of current salary and payable to the surviving spouse, dependent children or the dependent parent, plus a supplement of \$797.64 per year, per child (or \$312.00 per year in systems in which the local option contained in G.L. c. 32, s. 9(2)(d) (ii) has not been adopted), payable to the spouse or legal guardian until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

The surviving spouse of a member of a police or fire department or any corrections officer who, under specific and limited circumstances detailed in the statute, suffers an accident and is killed or sustains injuries while in the performance of his duties that results in his death, may receive a pension equal to the maximum salary for the position held by the member upon his death. In addition, an eligible family member may receive a one-time payment of \$100,000.00 from the State Retirement Board. This lump sum payment is also available to the family of a public prosecutor in certain, limited circumstances.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### DEATH AFTER ACCIDENTAL DISABILITY RETIREMENT

Effective November 7, 1996, Accidental Disability retirees were allowed to select Option C at retirement and provide a benefit for an eligible survivor. For Accidental Disability retirees prior to November 7, 1996, who could not select Option C, if the member's death is from a cause unrelated to the condition for which the member received accidental disability benefits, a surviving spouse will receive an annual allowance of \$6,000. For Systems that accept the provisions of Section 28 of Chapter 131 of the Acts of 2010, the amount of this benefit is \$9,000. For Systems that accept the provisions of Section 63 of Chapter 139 of the Acts of 2012, the amount of this benefit is \$12,000.

### DEATH IN ACTIVE SERVICE

**Allowance:** An immediate allowance equal to that which would have been payable had the member retired and selected Option C on the day before his or her death. For a member who became a member prior to April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 55 benefit rate is used. For a member classified in Group 1 who became a member on or after April 2, 2012 whose death occurred prior to the member's superannuation retirement age, the age 60 benefit rate is used. If the member died after age 60, the actual age is used. For a member classified in Group 2 or Group 4, whose death occurred prior to the member's minimum superannuation retirement age, the benefit shall be calculated using an age 55 age factor. The minimum annual allowance payable to the surviving spouse of a member in service who dies with at least two years of creditable service is \$3,000 unless the retirement system has accepted the local option increasing this minimum annual allowance to \$6,000, provided that the member and the spouse were married for at least one year and living together on the member's date of death.

The surviving spouse of such a member in service receives an additional allowance equal to the sum of \$1,440 per year for the first child and \$1,080 per year for each additional child until all dependent children reach age 18 or 22 if a full time student, unless mentally or physically incapacitated.

### COST OF LIVING

If a system has accepted Chapter 17 of the Acts of 1997, and the Retirement Board votes to pay a cost of living increase (COLA) for that year, the percentage is determined based on the increase in the Consumer Price Index used for indexing Social Security benefits, but cannot exceed 3.0%. Section 51 of Chapter 127 of the Acts of 1999, if accepted, allows boards to grant COLA increases greater than that determined by CPI but not to exceed 3.0%. Only a certain portion of a retiree's total allowance is subject to a COLA. The total COLA for periods from 1981 through 1996 is paid for by the Commonwealth of Massachusetts.

Under the provisions of Chapter 32, Section 103(j) inserted by Section 19 of Chapter 188 of the Acts of 2010, systems may increase the maximum base on which the COLA is calculated in multiples of \$1,000. For many years the COLA base was calculated based upon the first \$12,000 of a retiree's allowance. Now the maximum base upon which the COLA is calculated varies from system to system. . Each increase in the base must be accepted by a majority vote of the Retirement Board and approved by the legislative body.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### METHODS OF PAYMENT

A member may elect to receive his or her retirement allowance in one of 3 forms of payment.

**Option A:** Total annual allowance, payable in monthly installments, commencing at retirement and terminating at the member's death.

**Option B:** A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member, provided, however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree's beneficiary or beneficiaries of choice.

**Option C:** A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member's designated beneficiary (who may be the spouse, or former spouse who is has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or "pops up" to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable "pops up" to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

### ALLOCATION OF PENSION COSTS

If a member's total creditable service was partly earned by employment in more than one retirement system, the cost of the "pension portion" is allocated between the different systems pro rata based on the member's service within each retirement system. If a member received regular compensation concurrently from two or more systems on or after January 1, 2010, and was not vested in both systems as of January 1, 2010, such a pro-ration will not be undertaken. This is because such a person will receive a separate retirement allowance from each system.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### NOTE 2 - SIGNIFICANT ACCOUNTING POLICIES

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Public Employee Retirement Administration Commission.

Cash accounts are considered to be funds on deposit with banks and are available upon demand.

Short Term Investments are highly liquid investments that will mature within twelve months from the date of acquisition.

Investments are reported at their fair value. Securities traded on recognized exchanges are valued at the most recent sales price at year end. If no sale was reported, the mean of the bid and asked price is used when available, or the most recent bid price. Mutual, commingled and pooled funds are valued based on the net asset or unit value at year end. Real estate and alternative investments are valued based on estimates provided by the managers of those respective investments. Purchases and sales of securities are reflected on the date the trade is initiated. Realized gain or loss is largely based on the difference between the cost or the value at the prior year end and the funds realized upon liquidation. Dividend income is generally recorded when received. Interest income is recorded as earned on an accrual basis. Income from alternative investments is recorded as reported by the managing partner. Appreciation or depreciation in the value of investments consists of the unrealized gains and losses reported as the difference between the previous period and the current value.

The system makes estimates and assumptions that affect the reported values of assets and liabilities and the reported amounts added and deducted during the reporting periods. The fair value of real estate and alternative investment holdings are generally estimated in the absence of reliable exchange values. The actual funds realized upon liquidation may differ from these estimates.

The provisions of Massachusetts General Laws Chapter 32, § 23 (2) generally govern the investment practices of the system. The Board retains an investment consultant to closely monitor the implementation and performance of their investment strategy and advise them of the progress toward full funding of the system. That strategy seeks to balance the exposure to common deposit and investment risks related to custody, credit concentrations, interest rate and foreign currency fluctuations.

Operating expenses include the ordinary and necessary cost of investment and professional services and the other miscellaneous administrative expenses of the system.

## NOTES TO FINANCIAL STATEMENTS (Continued)

The Annuity Savings Fund is the fund in which members' contributions are deposited. Voluntary contributions, re-deposits, and transfers to and from other systems, are also accounted for in this fund. Members' contributions to the fund earn interest at a rate determined by PERAC. Interest for some members who withdraw with less than ten years of service is transferred to the Pension Reserve Fund. Upon retirement, members' contributions and interest are transferred to the Annuity Reserve Fund. Dormant account balances must be transferred to the Pension Reserve Fund after a period of ten years of inactivity.

The Annuity Reserve Fund is the fund to which a member's account is transferred upon retirement from the Annuity Savings Fund and Special Military Service Credit Fund. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance.

The Special Military Service Credit Fund contains contributions and interest for members while on a military leave for service in the Armed Forces who will receive creditable service for the period of that leave.

The Expense Fund contains amounts transferred from investment income for the purposes of administering the retirement system.

The Pension Fund contains the amounts appropriated by the governmental units as established by PERAC to pay the pension portion of each retirement allowance.

The Pension Reserve Fund contains amounts appropriated by the governmental units for the purposes of funding future retirement benefits. Any profit or loss realized on the sale or maturity of any investment or on the unrealized gain of a market valued investment as of the valuation date is credited to the Pension Reserve Fund. Additionally, any investment income in excess of the amount required to credit interest to the Annuity Savings Fund, Annuity Reserve Fund, and Special Military Service Credit Fund is credited to this Reserve account.

The Investment Income Account is credited with all income derived from interest and dividends of invested funds. At year-end the interest credited to the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund, and Special Military Service Credit Fund is distributed from this account and the remaining balance is transferred to the Pension Reserve Fund.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### NOTE 3 - SUPPLEMENTARY MEMBERSHIP REGULATIONS

The Boston Retirement System submitted the following supplementary membership regulations, which were approved by the Public Employee Retirement Administration Commission:

#### Creditable Service

November 18, 2013

**Creditable Service & Absence Without Regular Compensation** It is within the discretion of the State Boston Retirement System to allow up to thirty (30) days of creditable service to any member who was continuously absent without regular compensation pursuant to M.G.L. ch. 32, § 4(1)(c). The allowance of creditable service shall not exceed the number of days of continuous absence, if less than thirty, (i.e., 14 days of continuous absence may only be allowed 14 days of creditable service). In order to be considered for this award of creditable service, the applicable absence must have been authorized by the member's employer. This includes, but is not limited to, personal leaves of absence and Family and Medical Leave Act ("FMLA") leaves, provided that they are authorized by the employer. In no event shall a member be granted more than thirty (30) days of creditable service for such absences during the course of his entire membership with the State Boston Retirement System. This thirty (30) day cap applies to all members, including those who may have terminated and reinstated service.

October 2, 2002

**Rule 2000-5: RETIREMENT CREDIT FOR SERVICE RENDERED AS A PART-TIME MEMBER – EFFECTIVE JANUARY 26, 2001** (1) A member whose entire service is in a part-time position shall receive one year of creditable service for each year worked provided the member works the number of hours required by the position held. (2) A member employed on a part-time basis who becomes full-time shall receive credit for his part-time service on a pro-rated basis as it relates to a full-time position. (3) A member employed on a full-time basis who becomes part-time shall receive credit for his part-time service on a pro-rated basis as it relates to a full-time position. (4) Part-time membership service performed on or before November 21, 2000 shall be credited with full-time service. Thereafter, all part-time service shall receive credit in accordance with the rules stated in this regulation.

January 26, 2001

**Rule 2001-1: TEACHERS IN THE PUBLIC SCHOOLS OF THE CITY OF BOSTON** A "teacher," is any person employed under a contract with the Boston School Committee on a basis of not less than half-time service who (a) is deemed to be a teacher by the Boston School Committee and (b) performs services in a job title included in or substantially similar to those enumerated in Mass. Gen. Laws. c. 32, §1, paragraph 55 ("Teacher") or Mass. Gen. Laws. c.71, §38G, paragraph 19, and (c) (i) holds a certificate required by the Board of Education of the Commonwealth or (ii) has been granted a waiver pending certification by the Board of Education, or (iii) has been approved as an apprentice teacher in accordance with the provisions of St. 1985, c. 188, §21 or

## NOTES TO FINANCIAL STATEMENTS (Continued)

(iv) is exempted from the requirement of certification by the Commissioner of Education upon the request of the superintendent or by law or regulation.

November 9, 1987

In the case of any member who established credit for part time service rendered in a governmental unit covered by this system prior to his or her current period of membership, such credit will be allowed for the amount of actual service rendered as it bears to full-time service for the same or similar position.

### MISCELLANEOUS:

July 1, 2014

In no circumstance shall the Boston Retirement Board pay both a § 12(2)(c) ("Option C") and § 9 ("Accidental Death") benefit to two separate individuals, who may otherwise qualify. In cases where a member has nominated an Option C beneficiary, but where either a surviving spouse or legal guardian of an eligible child or children (who qualifies under § 9(2)(b)) or totally dependent father or mother or totally dependent unmarried or widowed sister (who qualifies under § 9(2)(c)), successfully petitions for § 9 Accidental Death Benefits, said petitioner shall trump and supersede the § 12(2)(c) Option C beneficiary with no monthly allowance being paid to the § 12(2)(c) Option C beneficiary. This supplementary regulation in no way impacts the issuance of the refund of the member's annuity fund pursuant to § 9(2).

May 27, 2014

**COLLECTION OF ARREARS FROM RETROACTIVE CHECKS** In those cases where it is determined that a retiring member owes the State Boston Retirement System monies for whatever reason any arrears owed to the State Boston Retirement System shall be firstly deducted from the "net amount" due to a member and to be paid in a "retroactive check". The "net amount" is that amount of monies payable to a member after all legal deductions are taken for items, such as, but not only, child support, tax levy, mortgages, loans, attorney fees, health insurance, etc. A "retroactive check" is the first pension check paid to a member as a result of filing an intent to retire or being granted a disability allowance by the State Boston Retirement System. In no event shall the State Boston Retirement System recoup more than 50% of the net amount of the member's retroactive check. Should there still remain a balance of monies owed to the retirement system, after the issuance of the retroactive check, Board staff shall utilize the Vatalaro formula to collect the balance of monies owed to the State Boston Retirement System.

September 18, 2013

For the purpose of M.G.L. c. 32, § 7(2)(a)(ii) only, the following phrase shall have the following meaning: "has not been continuously a member in service" shall mean that the 75% limitation on an accidental disability retirement allowance of any member, with a membership date prior to January 1, 1988, is applicable, only if: the member had an unauthorized leave of absence without pay consisting of 31, or more, consecutive days, since January 1, 1988, but specifically not including any department approved or authorized leaves of absence. For the purposes of M.G.L. ch. 32, § 7(2)(a)(ii) only, any unauthorized leave, or leaves, of absence without pay consisting of



## NOTES TO FINANCIAL STATEMENTS (Continued)

30, or less, days does not constitute a severance of continuous employment. Thus, any member with a membership date prior to January 1, 1988, who had an unauthorized leave, or leaves, of absence without pay of 30, or less, days since January 1, 1988, shall not be subject to the 75% limitation on an accidental disability retirement allowance.

September 16, 2013

I. Arrears owed to the retirement system due to contribution rate errors – Effective November 1, 2012 a. Preamble i. The trustees of the Boston Retirement Board have waived nearly \$4 million dollars since 2000, largely monies owed to the retirement system due to incorrect contribution rates. This causes an obvious financial strain on the retirement system. ii. Effective November 1, 2012, members who are identified as owing monies to the retirement system due to incorrect contribution rates shall be required to make their account whole. iii. The Vatalaro formula allows a member to repay arrears in those cases where the member's retirement date is approaching and a lump sum payment would create a financial hardship. iv. Members-in-service who are in arrears are required to repay any arrears, even if he or she is not yet on the retirement payroll. Repayment may be in a lump sum or installment plan as approved by the Trustees. v. The Trustees retain their rights to exercise their discretionary power to waive future arrears, as enunciated in MGL ch. 32, § 20(5)(c)(3), which states, in pertinent part: "at the request of a member who has been determined to owe funds to the retirement system, the board may waive repayment or recovery of such amounts" b. Formula for post-retirement repayment of arrears. i. The Trustees believe that there is a fair way to reconcile the erroneous contribution rate without unnecessarily burdening the member of the retirement system: 1. The "Unmodified" retirement allowance, Annuity and Pension for the member shall be calculated as if he had made the required payment; 2. The member's annuity should be recalculated based upon the actual contribution he made to the system;

3. The member's "Modified" total retirement allowance will therefore be equal to the sum of the pension portion (determined as if he had contributed at the correct rate) and an annuity (determined from actual contributions); and, 4. At such time as the total sum of the difference between the Modified and Unmodified pension allowances exceeds the amount the Member failed to repay the system, the Member shall receive the Unmodified allowance.

a. The Vatalaro formula is enunciated in the matter of Anthony Vatalaro vs. State Retirement Board, CR-9962 (CRAB March 16, 1987) c. Option Selection. i. A member who elected Option B must name the "Boston Retirement Board" as an option B beneficiary to the extent of the arrears only. 1. Any net monies above and beyond the arrears will be paid to the other Option B beneficiary or beneficiaries. 2. In the event the member elects Option C. the Option C beneficiary is responsible for continuing the Vatalaro repayment until the member's account is made whole a. Any Option C beneficiary must agree to waive that portion being collected until the account is made whole pursuant to MGL ch. 32, §90B.



## NOTES TO FINANCIAL STATEMENTS (Continued)

February 22, 2006

Rule 2005-4 EFFECTIVE DATE OF RETIREMENT FOR TEACHERS UNDER 10-MONTH CONTRACT If a member is in service until the school in which he is employed closes for the school year, his retirement shall not take effect earlier than (sic) 12 o'clock midnight on June 30 irrespective of any earlier date, which may be designated on his application.

June 10, 2005

13.01. Purpose. The purpose of 807 CMR 13.00 is to bring certainty and definiteness to the requirements of G.L. c. 32, § 5(4) governing the election to participate in the enhanced superannuation retirement plan provided in that statute for Transferees. Specifically, the purpose is to clarify the election opportunities available to (1) members transferring into the Massachusetts Teachers' Retirement System ("System") who have already made an election into RetirementPlus; (2) members who have taken refunds; and (3) members transferring out of the System, consistent with the statutory requirement that all such elections be irrevocable. 13.02. Definitions. For purposes of 807 CMR 13.00, the following terms shall have the following meanings: "Election Opportunity" shall mean the 180-day election "window" available to Transferees in G.L. c. 32, § 5(4). Said election "window" shall begin on the date when the System receives the transfer of the member's account from the other contributory retirement system. "Retirement Plus" shall mean the enhanced superannuation retirement allowance provided for in G.L. c. 32, § 5(4). This term includes the Teachers' Alternate Retirement Program ("TARP") of the Boston Retirement System. "Transferee" shall mean any member of another chapter 32 Massachusetts contributory retirement system who is transferring his or her membership to the System, or a member of the System who is transferring to another c. 32 contributory retirement system. 13.03. Refunds. (a) Any member who takes a refund of accumulated total deductions pursuant to G.L. c. 32, § 10(4) and after July 1, 2001 re-establishes membership with the System or the Boston Retirement System shall be a mandatory participant in Retirement Plus. Any member who takes a refund of accumulated total deductions pursuant to G.L. c. 32, § 10(4) and after July 1, 2001 re-establishes membership with another contributory retirement system, and later transfers to the System, shall be treated like any other Transferee.

13.04. Transfers In.

(a) Except as provided below, any Transferee into the System shall have an Election Opportunity. (b) Because an election opportunity is irrevocable, any Transferee into the System who, since his/her date of membership (or re-establishment of membership after a refund), has made an election to participate or not participate in Retirement Plus (or who failed to so elect when an opportunity was available), shall not have another Election Opportunity. The rights of such a Transferee shall be governed by his or her previous election or non-election.

(c) Any Transferee into the System who is or was a mandatory participant in Retirement Plus shall not have an Election Opportunity. 13.05 Transfers Out. In transferring a Transferee's account to another contributory retirement system, the System will transfer the entire account and break out for the other retirement systems the "excess" contributions over the normal retirement contribution rate.

## NOTES TO FINANCIAL STATEMENTS (Continued)

September 27, 2000

Boston Retirement Rule 2000-2 regulates the buyback of up to four years of maternity leave by teachers who are members of the State-Retirement System, as permitted by G.L. c. 32, §4(1)(g-1/2), which was inserted by Chapter 114 of the Acts of 1999.

June 9, 1999

Upon receipt of a member's application for military credit under c. 71 of the Acts of 1996, the Board shall further prepare a bill for the cost of the buyback. Upon the member's receipt of a bill for the military service credit, the member must within 60 days of receipt of the bill, either (i) pay the bill in full or (ii) enter into a payment schedule for full payment of the bill. Payment schedules for the buyback of military service credit shall be available to a member whose buyback bill exceeds \$1,000.00. Payment schedules must be completed within a five-year period or before the member retires, whichever comes first. No interest shall be charged over the period of the payment schedule. The Board may extend the five-year maximum payment period upon a showing by the member that the monthly payment amount for a five-year period would create an undue hardship upon the member.

September 17, 1996

Supplementary rule relating to procedures for board election under c. 306 approved.

March 26, 1991

Approval of "Disability Retiree Medical Questionnaire" for use by Board in processing cases under G.L. c. 32, § 8.

November 28, 1990

Approval of "Disability Retiree Employment and Earnings Form" for use by Board.

June 20, 1990

Supplementary rule authorizing a 60 day notice period for the retirement board election approved.

Travel Regulations:

The Boston Retirement System has adopted Travel Supplemental Regulations under the provisions of G.L. c. 7, § 50 and G.L. c. 32, § 21(4). Regulations available upon written request, and are also available on the PERAC website (<http://www.mass.gov/perac/Boston>).

## NOTES TO FINANCIAL STATEMENTS (Continued)

### NOTE 4 - ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the City Auditor who shall be a member ex-officio, a second member appointed by the governing authority, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the other four board members.

|                    |                                 |               |           |
|--------------------|---------------------------------|---------------|-----------|
| Ex-officio Member: | Sally D. Glora                  |               |           |
|                    |                                 |               |           |
| Appointed Member:  | Daniel J. Greene, Esq. Chairman | Term Expires: | 2/28/2017 |
|                    |                                 |               |           |
| Elected Member:    | Michael W. McLaughlin           | Term Expires: | 9/30/2017 |
|                    |                                 |               |           |
| Elected Member:    | Michael D. O'Reilly             | Term Expires: | 9/30/2017 |
|                    |                                 |               |           |
| Appointed Member:  | Thomas V.J. Jackson             | Term Expires: | 1/14/2018 |

The Board members are required to meet at least once a month. The Board must keep a record of all of its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the system. The board must annually file a financial statement of condition for the system with the Executive Director of PERAC.

The investment of the system's funds is the responsibility of the Board. All retirement allowances must be approved by the Retirement Board. The PERAC Actuary performs verification prior to payment, unless the system has obtained a waiver for superannuation calculations allowing them to bypass this requirement. All expenses incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by two persons designated by the Board.

The retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts. Fidelity insurance is the only required policy coverage under Ch 32 §21 and §23 as well as 840 CMR17.01. The policy is designed to cover specific intentional acts such as theft, fraud or embezzlement and also specify who commits such acts, most commonly employees of the system. This coverage reimburses the system for the losses it suffers as a result of its employees' actions. It does not insure the employees for their illegal acts. Statutorily required coverage is provided by the current fidelity insurance policy to a limit of \$1,000,000 with a \$10,000 deductible issued through Travelers Casualty and Surety Company of America.

## NOTES TO FINANCIAL STATEMENTS (Continued)

### NOTE 5 - ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Segal Consulting as of January 1, 2014.

|   |                               |
|---|-------------------------------|
| The actuarial liability for active members was                    | \$4,071,223,481               |
| The actuarial liability for inactive members was                  | 165,599,527                   |
| The actuarial liability for retired members and survivors was *   | <u>4,817,907,125</u>          |
| The total actuarial liability was                                 | \$9,054,730,133               |
| System assets as of that date were                                | <u>5,383,891,226</u>          |
| The unfunded actuarial liability was                              | <u><u>\$3,670,838,907</u></u> |
| <br>The ratio of system's assets to total actuarial liability was | <br>59.5%                     |
| As of that date the total covered employee payroll was            | \$1,444,652,000               |

|  |                 |
|--|-----------------|
| The normal cost for employees on that date was | 9.9% of payroll |
| The normal cost for the employer was           | 3.5% of payroll |

The principal actuarial assumptions used in the valuation are as follows:

|                          |   |
|--------------------------|---|
| Investment Return:       | 7.75% for Teachers 8.00% per annum                                    |
| Rate of Salary Increase: | 4.5%, 4.75%, 5.0% for Groups 1, 2, 4 - Varies by service for teachers |

#### GASB STATEMENT NO. 25, DISCLOSURE INFORMATION AS OF JANUARY 1, 2014

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value of<br>Assets<br>( a ) | Actuarial<br>Accrued<br>Liability<br>( b ) | Unfunded<br>AAL<br>(UAAL)<br>( b-a ) | Funded<br>Ratio<br>( a/b ) | Covered<br>Payroll<br>( c ) | UAAL as a<br>% of<br>Cov. Payroll<br>( (b-a)/c ) |
|--------------------------------|--|--|--------------------------------------|----------------------------|-----------------------------|--|
| 1/1/2014                       | \$5,383,891,000                          | \$9,054,730,000                            | \$3,670,839,000                      | 59.5%                      | \$1,444,652,000             | 254.1%   |
| 1/1/2013                       | \$5,073,098,000                          | \$8,199,808,000                            | \$3,126,710,000                      | 61.9%                      | \$1,360,385,000             | 229.8%   |
| 1/1/2012                       | \$4,855,200,000                          | \$7,902,175,000                            | \$3,046,975,000                      | 61.4%                      | \$1,301,803,000             | 234.1%   |
| 1/1/2011                       | \$4,592,675,000                          | \$7,283,907,000                            | \$2,691,232,000                      | 63.1%                      | \$1,371,363,000             | 196.2%   |
| 1/1/2010                       | \$4,270,893,000                          | \$7,091,018,000                            | \$2,820,125,000                      | 60.2%                      | \$1,306,060,000             | 215.9%   |

\*The amount shown for the actuarial liability for retirees was adjusted from the figure shown in the Segal valuation report, so that the figures would add to the correct total liability as shown in the Segal valuation.

# NOTES TO FINANCIAL STATEMENTS (Continued)

## NOTE 6 - MEMBERSHIP EXHIBIT

|   | 2004             | 2005             | 2006             | 2007             | 2008             | 2009             | 2010             | 2011                 | 2012                 | 2013                 |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|----------------------|----------------------|
| <b>Retirement in Past Years</b>             |                  |                  |                  |                  |                  |                  |                  |                      |                      |                      |
| Superannuation                              | 335              | 796              | 489              | 343              | 412              | 427              | 625              | 479                  | 486                  | 424                  |
| Ordinary Disability                         | 5                | 5                | 11               | 12               | 5                | 8                | 4                | 6                    | 7                    | 1                    |
| Accidental Disability                       | 54               | 55               | 82               | 67               | 66               | 139              | 58               | 40                   | 60                   | 41                   |
| <b>Total Retirements</b>                    | <b>394</b>       | <b>856</b>       | <b>582</b>       | <b>422</b>       | <b>483</b>       | <b>574</b>       | <b>687</b>       | <b>525</b>           | <b>553</b>           | <b>466</b>           |
| Total Retirees, Beneficiaries and Survivors | 13,878           | 13,913           | 13,874           | 13,849           | 13,752           | 13,894           | 14,067           | 14,104               | 14,915               | 14,228               |
| Total Active Members                        | 20,882           | 21,069           | 21,473           | 21,638           | 21,613           | 20,909           | 19,663           | 19,418               | 20,970               | 20,767               |
| <b>Pension Payments</b>                     |                  |                  |                  |                  |                  |                  |                  |                      |                      |                      |
| Superannuation                              | \$216,304        | \$189,456        | \$213,032        | \$244,316        | \$254,932        | \$265,613        | \$283,321        | \$300,211,010        | \$313,474,654        | \$323,904,410        |
| Survivor/Beneficiary Payments               | 8,114            | 10,084           | 8,833            | 9,181            | 9,458            | 9,701            | 10,186           | 10,519,654           | 10,107,650           | 11,293,705           |
| Ordinary Disability                         | 3,285            | 3,744            | 3,377            | 3,529            | 3,412            | 3,494            | 3,552            | 3,586,109            | 3,505,512            | 3,360,137            |
| Accidental Disability                       | 40,578           | 46,616           | 49,307           | 54,953           | 54,148           | 60,142           | 64,689           | 68,699,767           | 69,463,922           | 74,180,033           |
| Other                                       | 15,666           | 48,223           | 24,785           | 23,910           | 25,299           | 24,782           | 25,001           | 25,768,360           | 26,184,585           | 26,239,501           |
| <b>Total Payments for Year</b>              | <b>\$283,947</b> | <b>\$298,123</b> | <b>\$299,334</b> | <b>\$335,889</b> | <b>\$347,249</b> | <b>\$363,732</b> | <b>\$386,749</b> | <b>\$408,784,901</b> | <b>\$422,736,323</b> | <b>\$438,977,786</b> |

## NOTES TO FINANCIAL STATEMENTS (Continued)

### NOTE 7 - SOFTWARE ACQUISITION AND DEVELOPMENT COSTS

During fiscal year 2008, the System signed a memorandum of understanding with the City for the purpose of financing the development, design, purchase and installation of a pension management system. Upon completion of the pension management system, the City will transfer the completed asset to the System. The System is committed to repaying the City \$20.0 million, of which approximately \$9.7 million has been paid through December 31, 2013.

### NOTE 8 – BOSTON RETIREMENT SYSTEM FUNDING OBLIGATIONS

Prior to May 22, 2010, the obligation for teachers who are members of the Boston Retirement System had been funded on a pay-as-you-go basis. Chapter 112, Acts of 2010 §§ 7 through 18 mandated the apportioning of the assets related to Boston teachers' from the remainder of the Boston Retirement System's investments. The statute required those assets be transferred into PRIM for the benefit of Boston teachers, and continue to be reported as part of the State- Boston Retirement System financials. The major change is that Massachusetts Teachers' Retirement System (MTRS) will no longer fund any shortfall between the actual cost of Boston teachers' benefits and the appropriation funded by the Commonwealth of Massachusetts. As of July 1, 2010 (FY 2011), the Commonwealth of Massachusetts took over as a contributing employer for Boston teachers. The Comptroller of the Commonwealth retains considerable discretion in timing the funding of the appropriations associated with both the MTRS and the portion attributed to the Boston Teachers' assets transferred into PRIM. This discretion is directed by the normal budgetary considerations inherent within the Commonwealth's legislative process. As a practical matter, it was determined to use MTRS as a conduit to fund the portion directly to the City of Boston to be used for the exclusive benefit of their teachers. MTRS received, as part of its FY10 appropriation, \$115,986,000 for the Boston teachers. That exact amount was forwarded to the City of Boston on June 17, 2010. The FY 2011 appropriation for Boston teachers of \$121,290,000 was received by MTRS in December and paid to Boston on January 10, 2011. Going forward, the Boston teachers' appropriation received from the Commonwealth will be forwarded promptly upon receipt by MTRS.



PERAC

Five Middlesex Avenue | Suite 304

Somerville, MA | 02145

Ph: 617.666.4446 | Fax: 617.628.4002

TTY: 617.591.8917 | Web: [www.mass.gov/perac](http://www.mass.gov/perac)